

UNWATERING THE MINES STOCKTON DISTRICT

Owners of Property Awaiting Completion of Great Honerine Tunnel.

Ophir the Scene of Much Active Work and Large Shipments Being Made—Work in Dry Canyon.

The approach to a commanding position which has been gained by the famous old camp of Stockton during the past year is to be measured almost entirely by the operations of the Honerine company. It is because of an unwillingness on the part of other companies to do anything, but because of the fact that a great number of them have been waiting for the day when the big drainage tunnel of the company named shall have unwatered the mines and made operations correspondingly less expensive. A large percentage of these properties are already beginning to feel the effects of the work so far done in the drain tunnel, and by the time spring rolls around there will not be many mines in the district that cannot resume operations.

The Black Diamond, Cyclone, Galena King, East Honerine, Calumet, Shamrock, Legal Tender, Hercules, Bullion, Argent, Kathryn and several other properties will be in the ranks of direct beneficiaries, and when they all get down to work the old camp will be one of the liveliest in Utah. Its production of ore will also cut no small figure in the state's production of lead, gold, silver and copper, for all of these metals are found in the ores of that district.

Honerine's Great Tunnel.

Under the management of Willard Snyder and the superintendency of E. J. Raddatz the Honerine company has made a record during the year for development and improvement which has not been equaled by any other company in the state. All things considered, in the face of almost insurmountable difficulties the great tunnel has been advanced to a point well over 3,000 feet, or a distance of over 3,000 feet during the year. Some of the country penetrated was so wet and loose that at the end of a month's work it could hardly be seen that any headway had been made. Often the work would have to be carried on from three separate faces, one designed to relieve the pressure of water and running ground, while a few inches' advance might be made at another. No one wavered for a moment, however, and one by one each obstacle has been met and overcome, until now it begins to look as though easier sailing awaited.

To carry on this work has cost a mint of money, to say nothing of the anxiety and worry that it has occasioned, and when it is finally completed it is safe to say that those upon whom the responsibility has rested will utter some long drawn sighs of relief. They will have had the satisfaction, however, of reclaiming one of the richest mineral-bearing sections of this state, besides making of their own property one of the greatest producers of the entire west.

Much Ore Exposed.

Aside from driving the tunnel mentioned, the company has done several thousands of feet of work in the old upper tunnel portion of the mine, with the result that today there is blocked out and ready for mining not less than 200,000 tons of ore, which, conservatively estimated, will bring the company net returns exceeding \$1,000,000. These ore bodies have nothing at all to do with the monster bodies of sulphide ore which were opened below the water level previous to the decision to run the long 8,000-foot tunnel.

In the meantime an up-to-date milling plant, capable of treating between 200 and 400 tons of ore per day, has been under construction, and, barring unforeseen delays, it will be in operation in a matter of sixty days. It will be run on such ore as need treatment from the upper workings until the sulphide bodies below have been reached, and when once it is in full operation the company will begin the making of money very rapidly.

In addition to the mill the company has erected machine shops, storehouses and other structures for the conduct of its business, and during the year to come the townsite of Buhl, below the entrance to the tunnel, will become the main town of the camp. Up to the present time the company, comprising only a very few operators, including F. H. Buhl, P. L. Kimerley, Willard F. Snyder, C. H. Scheu, W. G. Filer and J. E. Walker, has spent more than \$750,000 in the Honerine enterprise, and it is good to know that their perseverance and pluck are sure of substantial and lasting reward.

At Ophir and Dry Canyon.

Separate districts in themselves, but so closely attached to Stockton that they belong to the latter camp as much as do the individual districts surrounding Park City, Ophir and Dry Canyon deserve a word of mention. The former has witnessed a season of unusual activity, and while Senator W. A. Clark's Ophir Hill property has been the principal producer, good work has been done in other properties, and the future of the district holds out much of promise. Being an individual proposition, little is given out regarding the operations of the Ophir Hill, though the fact that its enlarged mill has been steadily pounding away during the year emphasizes the fact that the property is one of the best low grade money makers in Utah.

Stimulated by the success there being attained by its neighbors, the Montana Consolidated on one side and the Ophir Queen on the other have been steadily prosecuting development work during the year. Splendid showings have been made in each, and the coming twelve months are counted upon to bring both of them into the shipping lists.

Western Exploration Company.

The Western Exploration company has joined St. Louis operators in the same camp and the expectation is that they, too, will be heard from during 1904, though they are conducting operations without any blowing of trumpets.

The old Chloride Point property, on Lion Hill, has been contributing occasional shipments of rich ore during the year, and other properties have been under development with most encouraging results.

In Dry canyon, between Ophir and Stockton, the new company, which acquired the old Mono bonanza, has been doing good work in opening the old mine at greater depth, and the prospects for its re-entering the lists of big producers in the not distant future are said to be most bright.

Prospectors and claim owners have been doing more or less work all through the camps constituting the Stockton region, and things will be humming all along the line within another twelve months.

Riches of The Humboldt Range

The impetus given to mining development in Nevada since the recent discovery of the Tonopah riches, which have reached several millions of dollars during the past two years, has been felt in no section of that state more than in the Humboldt range, in Humboldt county, where a number of companies are now engaged in extensive operations. This section, during the early sixties, was a competitor of the famous Comstock in attracting the attention of California speculators. The ore shipments made by ore team, at great cost, were exceedingly rich. Mark Twain, at one time editor of the "Virginia City Enterprise," gives an account in his inimitable story of western adventures, "Roughing It," of a trip to Humboldt City, which he was induced to make by newspaper accounts of remarkably rich ore being shipped from the Sheba mine. It was in the Sheba also that the late Senator Hearst, made his first substantial gains in mining by selling an interest in that property, of which he was president, at a figure better than \$500 per share on the San Francisco exchange. This operation was the foundation for and was followed by similar successes in the Comstock, the Homestake in South Dakota and the Ontario in Utah.

Rich Humboldt Mines.

The Humboldt range is a continuation of the Comstock mineral belt. A comparison of the respective amounts of gold and silver produced by the Humboldt district discloses the surprising fact that for the amount of actual development work done, the Humboldt mines have produced more richly than the Comstock. From the Comstock mines over \$500,000,000 was taken, but to secure this amount a depth of 2,200 feet was attained and tunnels and drifts aggregating hundreds of miles were run. The production of the Humboldt range, which exceeded \$20,000,000, was taken from only a half dozen mines and the greatest depth reached was but 150 feet. The only hoist in the district is on the Sheba property, where a shaft was sunk fifty feet on the vertical and 130 feet on the incline.

Shipments from the Sheba and De Soto have given returns of over \$1,000 per ton. The largest amounts taken from this district were from the Rye Patch and Arizona mines, the production being \$14,000,000 and \$10,000,000 respectively. Within a length on the Sheba property of less than 2,000 feet, the Sheba has produced \$3,500,000, the De Soto \$4,000,000 and the Star Peak \$900,000.

Abandoned nearly thirty years ago, extensive operations were not resumed in this wonderful district until some two years since, when the Sheba property was acquired by Salt Lake investors. The management of the Sheba Gold and Silver Mining Company includes Hon. George W. Baruch, of the Utah supreme court, who is president and manager, Governor Heber M. Wells, of Utah, other prominent business men of Salt Lake and William H. Child, secretary and treasurer. Mr. Child is a native of Boston and came to Utah some five years ago, where he has since built up a successful stock brokerage business and has become identified with the development of numerous mining properties. His energies, however, have been, for the last two years, almost exclusively centered on the Sheba property, and his efforts are due largely to the work that has been done, both in the way of financing, mill building and mine development of the Sheba and Humboldt properties. In the promotion of the latter property he has been materially assisted by Mr. Edward Morrison and the Nevada-Humboldt mining business.

Work on the Sheba.

The work that has been carried on by this company in the re-opening of the Sheba mine will soon be brought to a successful culmination by the completion of an 800-foot tunnel, which will tap the vein at depth and drain the old mine. A concentrating mill has been placed in operation and from which the first run of concentrates recently made showed values to the extent of \$242 to the ton. A large amount of low grade ore running from \$10 to \$25 per ton is now on the dump and blocked out in the mine, which will give employment to the mill for many months to come.

A considerable amount of high-grade stuff has also been opened up in the old workings. A further shipment of ore and concentrates from the Sheba is now on the market. Those interested in this property and best acquainted with its possibilities are basing their greatest expectations on the completion of the Sheba tunnel, which now lacks less than forty feet of reaching a point from which, if the vein has not been tapped, an upraise can be made to the mill. This ore was left in the mine by reason of an excess of water. By the same means a connection will be made with the entire upper workings, the mine drained and an air shaft established.

Among the other operating advantages of the Sheba company, and a most unusual one in the state of Nevada, is the fact that both the mill and the air compressor, which is being used in furnishing power to the air drills in the lower tunnel, receive their propelling force from the waters of Star Creek. The connection being direct from the water wheel to the compressor and through the air pipe without the intervening use of electricity. The holdings of the Sheba company comprise thirty-eight claims with 4,500 feet on the Sheba vein and 7,500 feet on the Mammoth vein. The Mammoth property is a remarkable one in the immensity of the outcroppings.

Development of Mine.

From a few open cuts and a short tunnel run along the vein, over \$100,000 has been taken. The quartz ledge is, in places, over 400 feet wide and an ore chute thirty feet thick has been uncovered. A tunnel is being run to cross cut this vein at depth. It is now within 100 feet of the ore chute and has already opened up several gold bearing quartz ledges, one of which is six feet thick, and carries \$7.20 to the ton in gold.

The Morrison Mining Company has recently resumed operations after a shut down of more than a year's duration. This property is situated four miles from Humboldt House. Its production is estimated at \$85,000, which was taken out while less than 1,000 feet of development work was done. A shipment from this mine, over a year ago, showed values of 16 per cent lead, 429 ounces of silver and \$200 in gold to the ton. Operations are now conducted on the sinking of a double-compartment shaft, although it will be possible to extract more of the rich ore from the fifty-foot level, by means of the old incline, which has a total depth of ninety feet. This property covers about 500 acres and is traversed by six well defined veins.

Nevada-Humboldt Property.

South of the Morrison, the Nevada-Humboldt company is running a cross cut tunnel to tap the vein. This company owns a large group of claims extending 9,000 feet on the vein. According to engineers' reports this main ledge approximates twenty-five feet in thickness and discloses unusually fine surface showings from which samples have given an average value of more than \$30 per ton. A tunnel 100 feet long will tap this vein at a depth of sixty feet. The work will then be continued by drifting on the vein, making depth of a foot for every foot run. The tunnel is now about half completed. This property is located four miles from Humboldt House and Mr. Copley is secretary and treasurer of the company. At no place in the Humboldt range are indications more favorable for making a big mine than here. The regularity on the strike of the vein, its continuity and the fact that it has for a foundation, or foot wall, the great porphyry dyke which forms the crest of the range, causes the mining men to make strong predictions for its future. Numerous cuts and shafts along the vein reveal the

INSTALLING NEW PROCESS IN FAMOUS MERCUR MINE

Results in District Appear Unfavorable Because of Delay From the Change.

Believed That This Method Will Enable Many Abandoned Properties in Camp to Be Operated at Profit.

One year ago it was predicted that the advances being made in the cyanide treatment of gold ores would eventually result in many of the abandoned properties of the Mercur district being again brought into prominence. The past twelve months have not been barren of results in this direction, and the revival is expected to take on still greater proportions during the year to come.

Circumstances over which he had no control resulted in cessation of efforts on the part of George Moore to make a success of the Sunshine proposition, and when he was compelled to abandon that undertaking he at once arranged for the introduction of his own patented process for the treatment of ores and slimes at the Consolidated Mercur company's mammoth mill. The practicality of the process was first worked out in an experimental way at the mill and, when he had demonstrated to the satisfaction of the management that it would do the work claimed for it, he was authorized to proceed with the installation of the process on a large scale.

Adjusting Mercur Mill.

To perfect the mechanical devices and make the necessary changes in the plant to properly operate the process has required a great deal of time. The announcement is made, however, that the change year this property will be made productive and, on account of the close relationship that it bears to the Consolidated Mercur, it may develop that arrangements have been made to have the ore treated at the latter company's mill—either that or the sale of the property to the Con. Mercur company.

In other portions of the camp unmistakable signs of revival are to be seen, and with the Consolidated Mercur again in the dividend list, as it surely will be during the next few months, the outlook for the camp may be said to be brighter than for several years past.

Work on the Daisy.

Arthur Murphy has also undertaken the resurrection of the old Daisy mine. It is understood that he will very soon be ready to demonstrate that that proposition can be made to pay handsomely.

Considerable development has been done at the Jaguar company's property, and late reports indicate that the ground is giving a good account of itself. The probabilities are that during the coming year this property will be made productive and, on account of the close relationship that it bears to the Consolidated Mercur, it may develop that arrangements have been made to have the ore treated at the latter company's mill—either that or the sale of the property to the Con. Mercur company.

With the past few months a company has taken a lease on the old Geyser-Marion dumps and the equipment of the mill with new devices to handle the material has been practically perfected and during the year to come it is expected that splendid money will be made in the treatment of the thousands of tons of tailings which have been awaiting the advent of methods to successfully treat them.

Smelters Keep Pace with Mines

(Continued from Page 1, Section 2.)

ore per day can be treated. It also carries 150-ton lead stack, but the blowing in of that has not been attempted and will not be until the mines of the company have been further developed. This plant has also been constructed on the unit principle, and may be enlarged at the will of the management. As developments in its own and other properties justify, there is no reason to suppose other than that the majestic company will make a feature of the smelting business and accommodate all comers in that section of Utah.

Future of Industry Here.

With all this array of smelting capacity the mines of this region are opening up to such an extent and the milling capacity of the operating companies is growing so rapidly that the day is fast approaching when double the amount of furnaces will be needed in this valley, which is conceded on all hands to be the most ore producing center of the future for all of Utah, half of Nevada and Idaho, and a portion of Wyoming and Colorado as well. All of \$5,000,000 is now invested in the smelter industry of this state. Not less than 2,500 men hold their positions as a result of their operation and, if the signs of the times are read aright, it will be but a very few years until Salt Lake valley and the state of Utah leads the procession in the amount of ore annually reduced, the amount of money invested in the business and the number of men employed. Everything points that way. The mines are tributary, railroad facilities are unexcelled, fuel and fluxes are to be had in unlimited quantities and in easy distance, labor is plentiful, steady and reliable and the laws of the state are equitable and just.

Under such conditions why should not this valley become the greatest smelting center in the west?

Prince Cupid's Name.

(Boston Post.)

Prince Cupid, the newly elected delegate from the Copper Belt road, is delivered to the Republican caucus. He came up to the capitol in evening clothes, expecting to be received with open arms.

A doorkeeper stopped him and asked: "What do you want?"

"I'm Prince Kalautauale," he answered.

"Sorry, Prince, but you can't go in," replied the doorkeeper. "They're pulling off a caucus."

Prince Cupid exhibited a bunch of credentials to the doorkeeper, and, being admitted to the inner circle, returned and told the doortender how to pronounce his name.

Prince Cupid says the right way to pronounce his name is "Kal-e-an-yo-cia," and he ought to know.

Chance for the Buzzard.

(Philadelphia Post.)

Lewis Nixon, the New York Democratic politician and shipbuilder, finds himself a target for all the men with new nautical inventions. Of late there has been a marked run of submarine-bait architects. The other day, after listening for half an hour to explanations from a man who clearly favored of the crank, Mr. Nixon ventured to show a lack of faith, which caused the inventor to gather up his plans and throw them in great disgust.

"These submarine fellows are getting on my nerves," remarked Mr. Nixon to a friend.

"That chap wants to build a boat modeled after an eel. I'm looking for some man to turn up with the plans of a boat using the duck for a prototype, which can dive and wrench off the enemy's hull plates with its cast-iron bill, and, caught in shallow water, can spread its wings and fly away, uttering loud and defiant quacks on a steam quacker."

Pointed Paragraphs.

(Chicago News.)

Paint on the can will not purify the milk.

The average man wastes a lot of wind airing his views.

When the frost is on the pumpkin there's dyspepsia in the pie.

Love may laugh at locksmiths, but he who laughs last laughs best.

Don't marry a girl for the sake of beating her chaperon out of a job.

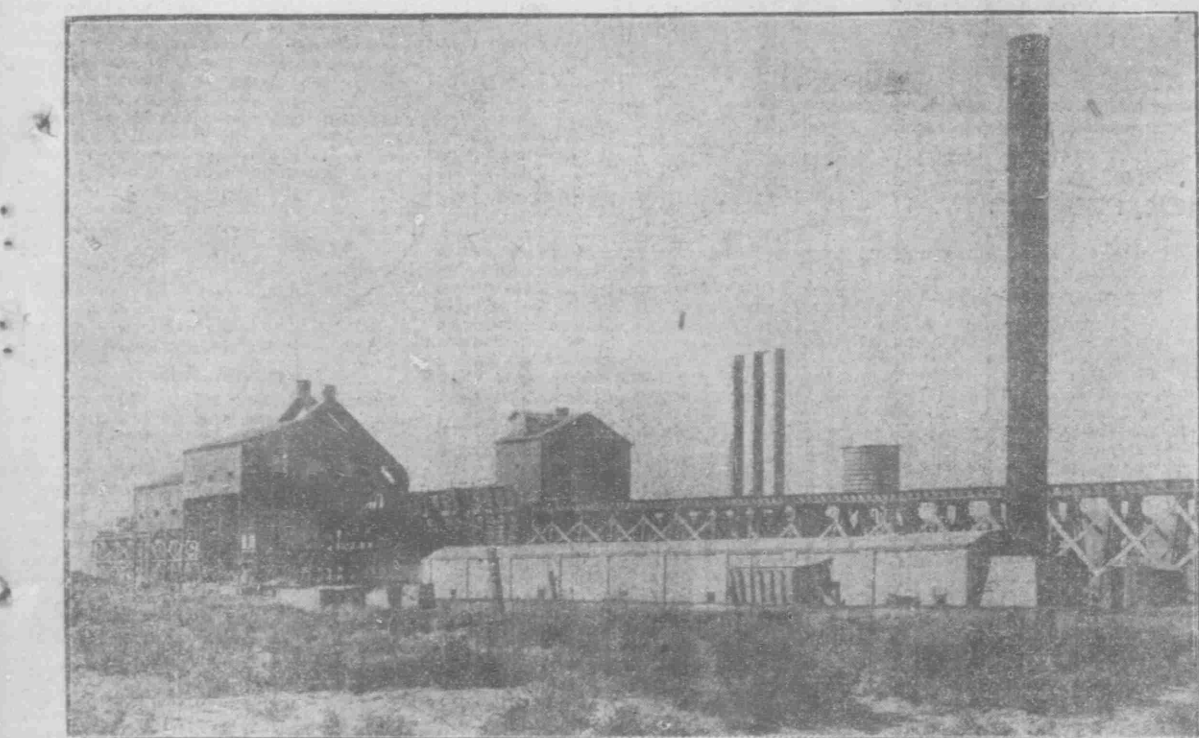
The woman who wastes her breath talking never seems in want of any.

Everything comes to him who waits—except the money he loaned a friend.

A whisky still is so called because the moonshiner has to work it on the quiet.

A combination of mushroom appetites and toadstool judgment is apt to prove fatal.

PROGRESS OF THE MAJESTIC COMPANY



THE MAJESTIC SMELTER

One of the noteworthy events in Utah mining, within the past year, was the blowing in of the furnace of the smelter of the Majestic Copper Mining & Smelting company in Beaver county. In the early part of November, this plant was erected under contract by the Colorado Fuel & Iron company, and while its capacity is not so large as that of many others in the state, its equipment is complete and its arrangement is convenient. It is located on the San Pedro, Los Angeles & Salt Lake railroad, a mile and one-half south of Milford. It is arranged for handling all kinds of ores found in that country, with a product of lead from one furnace with a capacity of 100 tons per day, while the furnace for making copper matte will consume 250 tons daily. Thus far the copper smelter only has been put in commission and the initial run has not only verified the efficiency of the plant, but has demonstrated that the ores of that country are not refractory and respond readily to smelter work. The matte produced has been of a superior quality and the value has been such as to surpass all expectations in the Beaver county copper ores.

The Majestic company is owner of a number of groups of mining claims that have proved their worth by past production and this worth is fully sustained by present showings. Among these properties are the famous O. K. mine, from which some two years ago two trainloads of ore, carrying over 40 per cent copper, and several dollars in

gold and silver to the ton, were taken. Also the Harrington-Hickory group, a producer of silver-lead ores, situated about a mile and one-half south of Milford, and the Old Hickory mine, which is a veritable hall of copper, which, while being low-grade, seems to be present in inexhaustible quantities. For the purpose of handling these latter ores a very economical transportation arrangement has been completed in the way of a spur from Hickory siding to the mine, where the ore is unloaded direct from the mine cars into the railroad cars.

The O. K. is located about a mile from Solus station, with a down-hill haul from the mine. While the wonderful values found in the O. K. have been limited as to the extent of ore, the more conservative values are being found in most encouraging quantities.

The surface showings of the Old Hickory are truly wonderful and have attracted attention of mining men from all over the country. On the north slope of the hill, below and around the collar of the main shaft, for several hundred feet, holes varying from ten to thirty feet have been sunk, and all of them are in ore that carries 3 per cent copper in silver and usually better copper values, with a few dollars to the ton in silver and gold. The deeper workings in the main shaft and by tunnels 100 and 200 feet deeper have responded with astonishing results. While the development in both these properties is as yet limited in extent, the indications are all that could be asked to justify the expectation that they together will be able, with intelligent work, to supply the wants of this smelter for a long time to come.

His Choice.

(Baltimore News.)

Fair Maude was a maid, with accomplishments rare, And Grace was a girl, who was winsome and fair.

And Phyllis was known, As a writer of fame, While Sue on the links Had a much envied name;

And John had his pick, when he married, From these—

Will you tell me which one John was married to, please?

Not Maude, for she knew Far too much for a wife; Nor Grace, for he'd be Jealous all of his life;

And Phyllis—well, no, He cared little for fame; And Sue—well, he wasn't Much up on that game.

In brief, John went out for another long look—

Kate cooked up a steak and he married the cook.

Hard Task.

(Chicago News.)

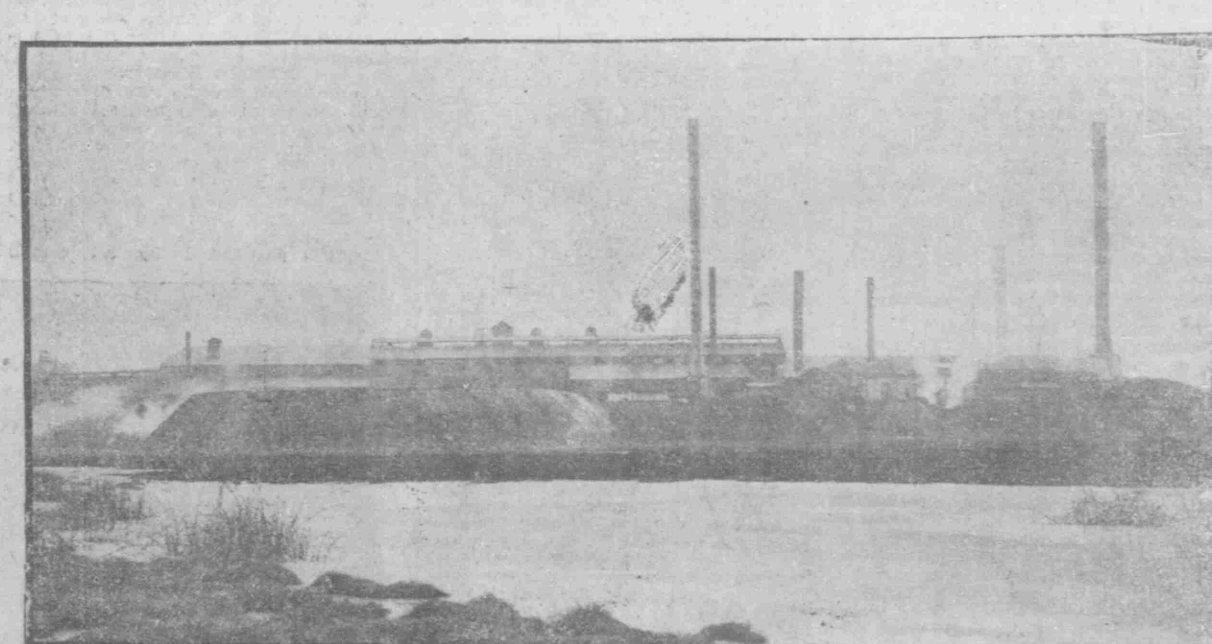
"Finished experimenting on your new breakfast food yet?" asked the inquisitive party.

"Yes," replied the great inventor, "and, while it is a great success, the hardest part is yet to come."

"What's that?" queried the I. P.

"Inventing a name for it," answered the modest genius.

A SUCCESSFUL MINING AND SMELTING COMPANY



BINGHAM CONSOLIDATED SMELTER.

A company that is operating both mines and a smelter to a degree in keeping with modern mining prevalent especially at Bingham, is the Bingham Consolidated Mining & Smelting company, which occupies a prominent position in that old and reliable camp. The company's mines are located in two separate sections of that camp, while the Eagle & Blue Bell, a recent acquisition, is situated in the neighborhood of the bonanzas in the Tintic district. The smelter, which produces copper bullion, is at Bingham Junction. The original corporation was the Bingham Copper & Gold Mining company, which owned the Commercial, Old Hickory and Venard claims. Subsequently the Dalton & Lark mines at Bingham were purchased, a smelter was erected, all of which became the property of the Bingham Consolidated.

Like most of the Bingham properties, the first products from these grounds were silver, lead and gold, which bodies were replaced by copper sulphides as the workings reached greater depths. An important work of this company in recent months was the completion of the Mascotte drain tunnel at the Dalton & Lark properties, which is over 6,000 feet in length. These properties are now drained and mining commenced on lower levels.

From the Commercial property, situated some three miles south, the ore is delivered to the Copper Belt road, which conveys it to the Rio Grande station at Bingham. The smelter is now reducing 550 tons daily, the Commercial property yielding with 250 tons. In addition to the shipping ore there are large quantities of milling ore in these mines which are being developed

with the intention of erecting a concentrator when the showing shall have become such as to justify the expenditure. Within the past eleven months the smelter has treated over 60,000 dry tons of ores from these Bingham properties, and has handled over 53,000 tons of custom ores. The output in copper bullion during that time reached a total of 8,017,364 pounds.

The company's manager is Duncan McVie, an experienced and successful mine operator, while the smelter is under the superintendency of W. H. Nutting, who has attained a desirable reputation with a large class of smeltermen. Identified with this enterprise is E. L. White, president of the commercial property, who has been prominent in financing this proposition, as well as other enterprises of magnitude in various parts of the west.